Danville Area School District
Course Overview and Scope and Sequence

Course Title: Foundations of Algebra
Content Area: Mathematics
Grade Level: 8th Grade
Date Developed: August 2023

COURSE OVERVIEW: This course is also aligned with the 8th grade Pennsylvania System of School Assessment (PSSA) anchors. Topics include eligible content including the number system, expressions and equations (including systems of equations), functions, intro to geometry concepts such as Pythagorean Theorem and transformations, probability and statistics. This course is designed for students who need additional help and support in mathematics. Students will take the PSSA Math test during the fourth marking period.
ANCHOR STANDARDS: CC.2.2.5.A.1, CC.2.2.7.B.1, M07.B-E.1.1.1, CC.2.3.8.A.2, M08.C-G.1, 8.G.A.1 8.G.A.2, 8.G.A.3, 8.G.A.4, 8.G.A.5, CC.2.2.8.B.2, CC.2.2.8.B.3, 8.EE.B.5, 8.EE.B.6, 8.EE.B.7, 8.EE.B.8, 8.F.B.4, CC.2.2.8.C.1, CC.2.2.8.C.2, 8.F.A.1, 8.F.A.2, 8.F.A.3, 8.F.A.4, 8.F.A.5, CC.2.2.8.B.1, 8.EE.A.1, 8.EE.A.3, 8.EE.A.4, CC.2.3.8.A.3, CC.2.3.8.A.1, 8.EE.A.2, 8.NS.A.1, 8.NS.A.2, 8.G.B.6, 8.G.B.7, 8.G.B.8, 8.G.C.9, CC.2.4.8.B.1 CC.2.4.8.B.2, 8.SP.A.1, 8.SP.A.2, 8.SP.A.3, 8.SP.A.4, 8.F.B.4, A1.1.3.1
KEY COURSE TEXT AND MATERIALS: Textbook Chromebook White Boards Projector Skills Review iReady Diagnostic
KEY ASSESSMENTS: Diagnostic: iReady Formative: quizzes, exit slips Summative: PSSAs, CDTs, unit tests

SCOPE AND SEQUENCE					
Unit	PRIORITY STANDARDS	SUPPORTING STANDARDS	ASSESSMENT	MATERIALS	TIMEFRAME
Unit 0: "Housekeeping" & Math 7 Skills Review	CC.2.2.5.A.1 CC.2.2.7.B.1 M07.B-E.1.1.1	M05.B-O.1.1.1 M05.B-O.1.1.2	Diagnostic Assessment (if within window)	Textbook Chromebook White Boards Projector Skill Reviews iReady Diagnostic	5 Days
Unit 1: Geometric Figures, Rigid Transformations and Congruence	CC.2.3.8.A.2 M08.C-G.1 8.G.A.1 8.G.A.2	CC.2.3.7.A.2	Coordinate Plane Quick Quiz Lesson Quizzes (1-3) Q&A Progress Monitoring Homework Checks Unit Test	Textbook Chromebook White Boards Projector Unit Packet- including all Worksheets	15 Days
Unit 2: Geometric Figures: Transformations, Similarity, and Angle Relationships	CC.2.3.8.A.2 M08.C-G.1 8.G.A.3 8.G.A.4 8.G.A.5	CC2.3.7.A.1 CC.2.2.8.B.3	Lesson Quizzes (4-7) Q&A Progress Monitoring Homework Checks Unit Test	Textbook Chromebook White Boards Projector Unit Packet- including all Worksheets	20 Days

Unit 3: Linear Relationships: Slope, Linear Equations, and Systems	CC.2.2.8.B.2 CC.2.2.8.B.3 8.EE.B.5 8.EE.B.6 8.EE.B.7 8.EE.B.8 8.F.B.4	CC.2.1.7.D.1 CC.2.2.7.B.1	Lesson Quizzes (8-14) Q&A Progress Monitoring Homework Checks Unit Test Unit 3 Choice Board	Textbook Chromebook White Boards Projector Unit Packet-including all Worksheets	36 Days
Unit 4: Functions: Linear and Non-Linear Relationships	CC.2.2.8.C.1 CC.2.2.8.C.2 8.EE.B.5 8.EE.B.6 8.F.A.1 8.F.A.2 8.F.A.3 8.F.A.4 8.F.A.5 8.SP.A.3	CC.2.2.8.B.3 CC.2.2.8.B.2 CC.2.1.7.D.1	Lesson Quizzes (15-18) Q&A Progress Monitoring Homework Checks Unit Test	Textbook Chromebook White Boards Projector Unit Packet-including all Worksheets	20 Days
Unit 5: Integer Exponents: Properties and Scientific Notation	CC.2.2.8.B.1 8.EE.A.1 8.EE.A.3 8.EE.A.4	CC.2.1.7.E.1	Lesson Quizzes (19-22) Q&A Progress Monitoring Homework Checks Unit Test	Textbook Chromebook White Boards Projector Unit Packet-including all Worksheets	20 Days
Unit 6: Real Numbers, Rational Numbers, Irrational Numbers, and the Pythagorean	CC.2.3.8.A.3 8.EE.A.2, 8.NS.A.1, 8.NS.A.2, 8.G.B.6,	CC2.2.8.B.3 CC.2.1.7.E.1	Lesson Quizzes (23-28) Q&A	Textbook Chromebook White Boards Projector	27 Days

Theorem	8.G.B.7, 8.G.B.8, 8.G.C.9		Progress Monitoring Homework Checks Unit Test and/or Unit Choice Board	Unit Packet- including all Worksheets	
Unit 7: Statistics: Two-Variable Data and Fitting a Linear Model	CC.2.4.8.B.1 CC.2.4.8.B.2 8.SP.A.1 8.SP.A.2 8.SP.A.3 8.SP.A.4 8.F.B.4	CC.2.4.6.B.1 CC.2.2.8.B.2	Lesson Quizzes (29-32) Q&A Progress Monitoring Homework Checks Unit Test	Textbook Chromebook White Boards Projector Unit Packet- including all Worksheets	19 Days
Unit 8: Solving Simple and Compound Inequalities	CC.2.4.8.B.1 A1.1.3.1	CC.2.2.8.B.3	Q&A Progress Monitoring Homework Checks Unit Quiz	Textbook Chromebook White Boards Projector Unit Packet- including all Worksheets	8-10 Days